ABSTRACT

Once slot synchronization has been obtained in a first step, during a second step there is acquired, by means of correlation of the received signal (r) with the synchronization codes, the information corresponding to the codegroup and to the fine slot synchronization. The synchronization codes are split into codesets. In a first step, a synchronization code identifying a corresponding codeset (CS) is identified by means of correlation and search for the maximum value of correlation energy. In a second step, the received signal (r) is correlated with the remaining codes belonging to the codeset identified. The information thus obtained, which corresponds to all the synchronization codes comprised in the codeset identified, is used for obtaining frame synchronization and codegroup identification. Preferential application is in mobile communication systems based upon standards, such as UMTS, CDMA2000, IS95 or WBCDMA.